



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,158	04/09/2001	James W. Rule	032810-001000	6551
7590	10/04/2005		EXAMINER	
Nixon Peabody LLP Raymond Van Dyke 401 9th Street NW Suite 900 Washington, DC 20004			BLACKWELL, JAMES H	
			ART. UNIT	PAPER NUMBER
			2176	
			DATE MAILED: 10/04/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

HN

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,158	04/09/2001	James W. Rule	032810-001000	6551
7590	04/08/2005			EXAMINER
Raymond Van Dyke Suite 300 South 1001 Pennsylvania Avenue, N.W. Washington, DC 20004				BLACKWELL, JAMES H
			ART UNIT	PAPER NUMBER
				2176

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/828,158	RULE, JAMES W.	
Period for Reply	Examiner	Art Unit	
	James H Blackwell	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 10 November 2004.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 6/20/01; 11/10/04 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date, _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

This Office Action is in response to Amendment received 11/10/04.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bobo II (hereinafter, Bobo II ('507), U.S. Patent No. 5,675,507).

In regard to independent Claim 1, Bobo II ('507) teaches a *central database storing said plurality of stored documents therein* in that Fig. 2 describes a process where a message storage and delivery system (MSDS) stores facsimile, voice, and data messages. Once received, these messages are stored in a database, and the database is updated, the recipient is notified that a message has been received (Col. 7, lines 6-12; Fig. 2). Bobo II ('507) also teaches a *user display device for displaying thereon at least one of said stored documents* in that the user accesses the Internet using a computer and web browser. Once connected with the Internet (30), at step 62, the user accesses with a hypertext browser the Universal Resource Locator (URL) associated with his or her MSDS (10) mailbox. The computer (32) may use any suitable hypertext browser, such as Netscape, to access the mailbox (Col. 7, lines 26-29). Bobo II ('507) also teaches that after the user gains access to the mailbox at step 72, the user can request information stored within the MSDS 10. The MSDS 10 receives the request at

step 76 and, at step 78, determines whether the information exists. The request from the user will include the mailbox number for the user, the message identifier, display preferences, and, if the message is a facsimile message, a page identifier (*pursuant to a given user query*). If the requested information is available, then at step 80 the information is transmitted through the Internet 30 to the user's computer 32. If, on the other hand, the information does not exist, then at step 82 the MSDS 10 will generate the requested information and then send the information to the user's computer through the Internet 30 at step 80 (*said central database forwarding said at least one document to said user display device*) (Col. 7, lines 38-56). Bobo II ('507) also teaches that *said at least one document containing a plurality of images* in that when the facsimile message (document) is received, the message is in a Tagged Image File Format/Facsimile (TIFF/F) and each page of the facsimile message (document) is split into a separate file (Fig. 6 also teaches that multi-page message documents are possible). Hence, the fax message can contain multiple pages (or images). Bobo II ('507) also teaches a number of display options (see Figs. 4a and 4b, Claims 21-23). In particular, the fourth option provides the user with a reduced size image of each page and permits the user to scroll through the entire message. The user can therefore read the entire facsimile message on screen before the message is downloaded onto the computer 32. With this option, the user can go through the pages of the facsimile message and can also skip to the next message or previous message. Additionally, the user has the option of enlarging a page to a full size view of the page (Col. 9, lines 18-29). Using this fourth display option and its additional option of enlarging a page to a full size view of the page, it would have

been obvious to one of ordinary skill in the art at the time of invention to have a user view a first page as a full sized page, and the rest of the pages as thumbnails. Compare this with what is claimed, *a first of said images being a full image and the remainder of said plurality of images being thumbnail images*. The motivation for doing this would have been to permit the user to clearly discern and/or read the content of a cover page to determine if they wanted the entire document to be downloaded based on what the content of the first page told them. Bobo II ('507) continues by teaching that *when a user of said user display device selects a given thumbnail image from said remaining plurality of images, the central database forwards the full image corresponding to said given thumbnail image* in that several display options taught by Bobo II ('507) use thumbnails of previous and/or next pages to link those previous and/or next thumbnails with their full-sized images which are then retrieved from the server (Col. 10, lines 27-37; Fig. 6, Table 1).

In regard to independent Claim 2, Bobo II ('507) teaches *selecting, by a user of a display device, said document stored within a central database* in that Bobo II ('507) describes that when a user selects one of the facsimile messages on the list, a request is sent to the HTTPD within the MSDS 10 causing the message to be downloaded via the Internet 30 to the user's computer 32 (Col. 8, lines 60-63). Bobo II ('507) also teaches *transmitting, by said central database to said display device, said plurality of images corresponding to said document* in that when the user selects one of the messages on the list, the selected facsimile message is transmitted through the Internet

30 to the computer 32 (Col. 9, lines 5-7). Bobo II ('507) also teaches a number of display options (see Figs. 4a and 4b, Claims 21-23). In particular, the fourth option provides the user with a reduced size image of each page and permits the user to scroll through the entire message. The user can therefore read the entire facsimile message on screen before the message is downloaded onto the computer 32. With this option, the user can go through the pages of the facsimile message and can also skip to the next message or previous message. Additionally, the user has the option of enlarging a page to a full size view of the page (Col. 9, lines 18-29). Using this fourth display option and its additional option of enlarging a page to a full size view of the page, it would have been obvious to one of ordinary skill in the art at the time of invention to have a user view a first page as a full sized page, and the rest of the pages as thumbnails. Compare this with what is claimed, *a first of said images being a full image and the remainder of said plurality of images being thumbnail images*. The motivation for doing this would have been to permit the user to clearly discern and/or read the content of a cover page to determine if they wanted the entire document to be downloaded based on what the content of the first page told them.

Bobo II ('507) also teaches that when said user of said display device selects a given thumbnail image from said remaining plurality of images, the central database forwards the full image corresponding to said given thumbnail image in that several display options taught by Bobo II ('507) use thumbnails of previous and/or next pages to link those previous and/or next thumbnails with their full-sized images which are then retrieved from the server (Col. 10, lines 27-37; Fig. 6, Table 1).

In regard to dependent Claim 3, Bobo II ('507) teaches a configuration element for providing speed and quality enhancements to processing image queries in that the user of the MSDS 10 can define in preferences how the MSDS 10 gets configured for how the messages are reviewed. With facsimile messages, for instance, the user can vary the amount or the type of information that will be supplied with the listing of the facsimile messages by selecting an appropriate option. Other options are also available so that the user can custom fit the MSDS 10 to the user's own computer 32 or own personal preferences (Col. 8, lines 33-40). It would have been obvious to one of ordinary skill in the art at the time of invention to allow the user to decrease the amount or type of information that gets transmitted thereby speeding up the transmission of the data by transmitting a smaller file to the user. Quality can likewise be varied by the type of information provided such as temporal parameters, size of the file, etc. that could be transmitted with the listing providing the user with information that allows them to make decisions about the downloading of the documents from the server.

In regard to dependent Claim 4, Bobo II ('507) teaches that the configuration element provides speed and quality enhancements to at least one of the group consisting of: cleanup of images, extraction of barcode values to automate data entry, and using database lookups to automatically populate index values in that the facsimile messages preferably undergo signal processing so that the images of the facsimile messages are converted from a two tone black or white image into an image with a varying gray scale. As is known in the art, a gray scale image of a facsimile message provides a better image than simply a black or white image of the message. The signal

processing may comprise any suitable standard contrast curve method of processing, such as anti-aliasing or a smoothing filter. The signal processing may occur concurrently with the conversion from TIFF/F to GIF and is preferably performed for both full and reduced size images of the facsimile messages (Col. 19, lines 5-16).

In regard to dependent Claim 6, Bobo II ('507) teaches that *the stored documents include respective image identification numbers for indexing each of said plurality of images in said at least one document* in that the files for each user are stored in a separate directory assigned to just that one user because an entire directory for a given user generally can be protected easier than the individual files. The memory, however, may be organized in other ways with the files for a single user being stored in different directories. The first part of the filename is a number preferably sequentially determined according to the order in which messages arrive for that user. The preferred naming convention for ending the filenames is depicted in Fig. 6. Each page of the facsimile message is saved as a separate file with an extension defined by the format of the file. Thus, the files will end with an extension of ".TIFF," ".PPM," ".GIF," or ".HTML" according to the format of the particular file. In the example shown, the separate pages have filenames, which end with the respective page number, for instance, the first page ends with a "1." The files, however, are preferably terminated with a letter or multiples letters to indicate the order of the pages. For instance, page 1 might have an ending of "aa," page 2 might have an ending of "ab," etc (Col. 11, lines 32-45; 46-52).

In regard to dependent Claim 7, Bobo II ('507) teaches *configuring indexing information to provide speed and quality enhancements when processing image queries*

in that the files for each user are stored in a separate directory assigned to just that one user because an entire directory for a given user generally can be protected easier than the individual files. The memory, however, may be organized in other ways with the files for a single user being stored in different directories. The first part of the filename is a number preferably sequentially determined according to the order in which messages arrive for that user. The preferred naming convention for ending the filenames is depicted in Fig. 6. Each page of the facsimile message is saved as a separate file with an extension defined by the format of the file. Thus, the files will end with an extension of ".TIFF," ".PPM," ".GIF," or ".HTML" according to the format of the particular file (Col. 11, lines 32-45).

In regard to dependent Claim 8, Bobo II ('507) teaches *the step of configuring indexing information provides at least one further step from the group consisting of: cleaning up the images, extracting barcode values to automate data entry, and using database lookups to automatically populate index values* in that the facsimile messages preferably undergo signal processing so that the images of the facsimile messages are converted from a two tone black or white image into an image with a varying gray scale. As is known in the art, a gray scale image of a facsimile message provides a better image than simply a black or white image of the message. The signal processing may comprise any suitable standard contrast curve method of processing, such as anti-aliasing or a smoothing filter. The signal processing may occur concurrently with the conversion from TIFF/F to GIF and is preferably performed for both full and reduced size images of the facsimile messages (Col. 19, lines 5-16).

In regard to dependent Claim 10, Bobo II ('507) teaches that *the document records comprise image identification numbers for indexing each of said plurality of images in said at least one document* in that the files for each user are stored in a separate directory assigned to just that one user because an entire directory for a given user generally can be protected easier than the individual files. The memory, however, may be organized in other ways with the files for a single user being stored in different directories. The first part of the filename is a number preferably sequentially determined according to the order in which messages arrive for that user. The preferred naming convention for ending the filenames is depicted in Fig. 6. Each page of the facsimile message is saved as a separate file with an extension defined by the format of the file. Thus, the files will end with an extension of ".TIFF," ".PPM," ".GIF," or ".HTML" according to the format of the particular file. In the example shown, the separate pages have filenames, which end with the respective page number, for instance, the first page ends with a "1." The files, however, are preferably terminated with a letter or multiples letters to indicate the order of the pages. For instance, page 1 might have an ending of "aa," page 2 might have an ending of "ab," etc (Col. 11, lines 32-45; 46-52).

Claims 5, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bobo II ('507) in view of Sprague (U.S. Patent No. 5,699,458).

In regard to dependent Claim 5, Bobo II ('507) fails to explicitly teach that *the thumbnail images are created and stored in a single file*. However, Sprague teaches a "thumbnail video sequence" may be transmitted to allow browsing of the video

Art Unit: 2176

sequence itself, which comprises a thumbnail version of each intracoded frame within the video sequence. This would allow the viewer to efficiently preview the movie before downloading the entire sequence (Col. 10, lines 41-51). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Bobo II ('507) and Sprague as both of these inventions relate to the efficient creation, transfer, and display of material from a server to a client. Adding the teaching of Sprague provides the benefit of containing a sequence of reduced size images within a single file avoiding the situation of retrieving each frame individually. Bobo II ('507) continues by teaching *using a system identification number* in that the files for each user are stored in a separate directory assigned to just that one user because an entire directory for a given user generally can be protected easier than the individual files. The memory, however, may be organized in other ways with the files for a single user being stored in different directories. The first part of the filename is a number preferably sequentially determined according to the order in which messages arrive for that user. The preferred naming convention for ending the filenames is depicted in Fig. 6. Each page of the facsimile message is saved as a separate file with an extension defined by the format of the file. Thus, the files will end with an extension of ".TIFF," ".PPM," ".GIF," or ".HTML" according to the format of the particular file (Col. 11, lines 32-45).

In regard to dependent Claim 9, Bobo II ('507) fails to explicitly teach that *the thumbnail images are created and stored in a single file*. However, Sprague teaches a "thumbnail video sequence" may be transmitted to allow browsing of the video sequence itself, which comprises a thumbnail version of each intracoded frame within

the video sequence (Col. 10, lines 41-51). This would allow the viewer to efficiently preview the movie before downloading the entire sequence. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Bobo II ('507) and Sprague as both of these inventions relate to the efficient creation, transfer, and display of material from a server to a client. Adding the teaching of Sprague provides the benefit of containing a sequence of reduced size images within a single file avoiding the situation of retrieving each frame individually. Bobo II ('507) continues by teaching *using a system identification number* in that the files for each user are stored in a separate directory assigned to just that one user because an entire directory for a given user generally can be protected easier than the individual files. The memory, however, may be organized in other ways with the files for a single user being stored in different directories. The first part of the filename is a number preferably sequentially determined according to the order in which messages arrive for that user. The preferred naming convention for ending the filenames is depicted in Fig. 6. Each page of the facsimile message is saved as a separate file with an extension defined by the format of the file. Thus, the files will end with an extension of ".TIFF," ".PPM," ".GIF," or ".HTML" according to the format of the particular file (Col. 11, lines 32-45).

Claims 11-13, 15-18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bobo II ('507) in view of Bobo II (hereinafter Bobo II ('066), U.S. Patent No. 6,350,066).

Art Unit: 2176

In regard to independent Claim 11, Bobo II ('507) teaches a document maker, said document maker creating document records for each of a plurality of documents and thumbnail representations of each image within a document in that the facsimile messages preferably undergo signal processing so that the images of the facsimile messages are converted from a two tone black or white image into an image with a varying gray scale. As is known in the art, a gray scale image of a facsimile message provides a better image than simply a black or white image of the message. The signal processing may comprise any suitable standard contrast curve method of processing, such as anti-aliasing or a smoothing filter. The signal processing may occur concurrently with the conversion from TIFF/F to GIF and is preferably performed for both full and reduced size images of the facsimile messages (Col. 19, lines 5-16). Bobo II ('507) also teaches a central database storing said plurality of created documents therein in that Fig. 2 describes a process where a message storage and delivery system (MSDS) stores facsimile, voice, and data messages. Once received, these messages are stored in a database, and the database is updated, the recipient is notified that a message has been received. The message is then converted to HTML based on user preferences (Col. 7, lines 6-12; Fig. 2). Bobo II ('507) also teaches that each document comprising a plurality of images in that when the facsimile message (document) is received, the message is in a Tagged Image File Format/Facsimile (TIFF/F) and each page of the facsimile message (document) is split into a separate file (Fig. 6 also teaches that multi-page message documents are possible) (Fig. 6). Hence, the fax message can contain multiple pages (or images). Bobo II ('507) also teaches that a

corresponding plurality of image identification numbers, whereby said image identification numbers index said plurality of documents in that in that the files for each user are stored in a separate directory assigned to just that one user because an entire directory for a given user generally can be protected easier than the individual files. The memory, however, may be organized in other ways with the files for a single user being stored in different directories. The first part of the filename is a number preferably sequentially determined according to the order in which messages arrive for that user. The preferred naming convention for ending the filenames is depicted in Fig. 6. Each page of the facsimile message is saved as a separate file with an extension defined by the format of the file. Thus, the files will end with an extension of ".TIFF," ".PPM," ".GIF," or ".HTML" according to the format of the particular file. In the example shown, the separate pages have filenames, which end with the respective page number, for instance, the first page ends with a "1." The files, however, are preferably terminated with a letter or multiples letters to indicate the order of the pages. For instance, page 1 might have an ending of "aa," page 2 might have an ending of "ab," etc (Col. 11, lines 32-45; 46-52). Bobo II ('507) does not explicitly teach a *system journal, said system journal logging and tracking functions performed by the document image management system on said documents stored in said central database.* However, Bobo II ('066) teaches logging and tracking functions performed by the document image management system on said documents stored in said central database in a system journal element in that one of the objects of Bobo II ('066)'s invention is to record and track correspondence, such as facsimile messages, voice mail messages, and data transfers

(Col. 5, lines 29-31). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Bobo II ('507) and Bobo II ('066) as both essentially describe the same invention, each choosing to focus on different aspects. One benefit of recording (logging) information into and out of the system would have been to assist in tracking down illegal intrusions into the system. Bobo II ('507) also fails to explicitly teach a *cache controller communicating with the central database and indicating to a user-side cache the status of images*. However, Bobo II ('507) suggests that caching takes place in that when the MSDS receives a request for information, it first determines whether the information exists. If it does, it sends it to the user. Otherwise, the information is generated according to user preferences and sent to the user (Col. 7, lines 38-50). It would have been obvious to one of ordinary skill in the art at the time of invention to cache Bobo II ('507)'s invention either on the user or client-side thus avoiding repeated generation of documents. Bobo II ('507) also teaches a *user display device for displaying thereon at least one of said stored documents, said central database forwarding said at least one document to said user* in that the user accesses the Internet using a computer and web browser. Once connected with the Internet (30), at step 62, the user accesses with a hyper-text browser the Universal Resource Locator (URL) associated with his or her MSDS (10) mailbox. The computer (32) may use any suitable hypertext browser, such as Netscape, to access the mailbox (Col. 7, lines 26-29).

In regard to dependent Claim 12, Bobo II ('507) teaches a *configuration element for providing speed and quality enhancements to processing image queries* in that the

user of the MSDS 10 can define in preferences how the MSDS 10 gets configured for how the messages are reviewed. With facsimile messages, for instance, the user can vary the amount or the type of information that will be supplied with the listing of the facsimile messages by selecting an appropriate option. Other options are also available so that the user can custom fit the MSDS 10 to the user's own computer 32 or own personal preferences (Col. 8, lines 33-40). It would have been obvious to one of ordinary skill in the art at the time of invention to allow the user to decrease the amount or type of information that gets transmitted thereby speeding up the transmission of the data by transmitting a smaller file to the user. Quality can likewise be varied by the type of information provided such as temporal parameters, size of the file, etc. that could be transmitted with the listing providing the user with information that allows them to make decisions about the downloading of the documents from the server.

In regard to dependent Claim 13, Bobo II ('507) teaches that *the configuration element provides speed and quality enhancements to at least one of the group consisting of: cleanup of images, extraction of barcode values to automate data entry, and using database lookups to automatically populate index values* in that the facsimile messages preferably undergo signal processing so that the images of the facsimile messages are converted from a two tone black or white image into an image with a varying gray scale. As is known in the art, a gray scale image of a facsimile message provides a better image than simply a black or white image of the message. The signal processing may comprise any suitable standard contrast curve method of processing, such as anti-aliasing or a smoothing filter. The signal processing may occur

Art Unit: 2176

concurrently with the conversion from TIFF/F to GIF and is preferably performed for both full and reduced size images of the facsimile messages (Col. 19, lines 5-16).

In regard to dependent Claim 15, Bobo II ('507) teaches that *the stored documents include respective image identification numbers for indexing each of said plurality of images in said at least one document* in that the files for each user are stored in a separate directory assigned to just that one user because an entire directory for a given user generally can be protected easier than the individual files. The memory, however, may be organized in other ways with the files for a single user being stored in different directories. The first part of the filename is a number preferably sequentially determined according to the order in which messages arrive for that user. The preferred naming convention for ending the filenames is depicted in Fig. 6. Each page of the facsimile message is saved as a separate file with an extension defined by the format of the file. Thus, the files will end with an extension of ".TIFF," ".PPM," ".GIF," or ".HTML" according to the format of the particular file. In the example shown, the separate pages have filenames, which end with the respective page number, for instance, the first page ends with a "1." The files, however, are preferably terminated with a letter or multiples letters to indicate the order of the pages. For instance, page 1 might have an ending of "aa," page 2 might have an ending of "ab," etc (Col. 11, lines 32-45; 46-52).

In regard to independent Claim 16, independent Claim 16 reflects the method for transmitting a plurality of images within a given document as Claimed in Claim 2, and is rejected along the same rationale. In addition, Bobo II ('507) fails to teach *logging and tracking functions performed by the document image management system on said*

documents stored in said central database in a system journal element. However, Bobo II ('066) teaches that one of the objects of Bobo II ('066)'s invention is to record and track correspondence, such as facsimile messages, voice mail messages, and data transfers (Col. 5, lines 29-31). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Bobo II ('507) and Bobo II ('066) as both essentially describe the same invention, each choosing to focus on different aspects. One benefit of recording (logging) information into and out of the system would have been to assist in tracking down illegal intrusions into the system.

In regard to dependent Claim 17, Bobo II ('507) teaches configuring indexing information to provide speed and quality enhancements when processing image queries in that the files for each user are stored in a separate directory assigned to just that one user because an entire directory for a given user generally can be protected easier than the individual files. The memory, however, may be organized in other ways with the files for a single user being stored in different directories. The first part of the filename is a number preferably sequentially determined according to the order in which messages arrive for that user. The preferred naming convention for ending the filenames is depicted in Fig. 6. Each page of the facsimile message is saved as a separate file with an extension defined by the format of the file. Thus, the files will end with an extension of ".TIFF," ".PPM," ".GIF," or ".HTML" according to the format of the particular file (Col. 11, lines 32-45).

In regard to dependent Claim 18, Bobo II ('507) teaches the step of configuring indexing information provides at least one further step from the group consisting of:

cleaning up the images, extracting barcode values to automate data entry, and using database lookups to automatically populate index values in that the facsimile messages preferably undergo signal processing so that the images of the facsimile messages are converted from a two tone black or white image into an image with a varying gray scale.

As is known in the art, a gray scale image of a facsimile message provides a better image than simply a black or white image of the message. The signal processing may comprise any suitable standard contrast curve method of processing, such as anti-aliasing or a smoothing filter. The signal processing may occur concurrently with the conversion from TIFF/F to GIF and is preferably performed for both full and reduced size images of the facsimile messages (Col. 19, lines 5-16).

In regard to dependent Claim 20, Bobo II ('507) teaches that the document records comprise image identification numbers for indexing each of said plurality of images in said at least one document in that the files for each user are stored in a separate directory assigned to just that one user because an entire directory for a given user generally can be protected easier than the individual files. The memory, however, may be organized in other ways with the files for a single user being stored in different directories. The first part of the filename is a number preferably sequentially determined according to the order in which messages arrive for that user. The preferred naming convention for ending the filenames is depicted in Fig. 6. Each page of the facsimile message is saved as a separate file with an extension defined by the format of the file. Thus, the files will end with an extension of ".TIFF," ".PPM," ".GIF," or ".HTML" according to the format of the particular file. In the example shown, the separate pages

have filenames, which end with the respective page number, for instance, the first page ends with a "1." The files, however, are preferably terminated with a letter or multiples letters to indicate the order of the pages. For instance, page 1 might have an ending of "aa," page 2 might have an ending of "ab," etc (Col. 11, lines 32-45; 46-52).

Claims 14, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bobo II ('507) in view of Bobo II ('066) and in further view of Sprague (U.S. Patent No. 5,699,458).

In regard to dependent Claim 14, Bobo II ('507) fails to explicitly teach that *the thumbnail images are created and stored in a single file*. However, Sprague teaches a "thumbnail video sequence" may be transmitted to allow browsing of the video sequence itself, which comprises a thumbnail version of each intracoded frame within the video sequence. This would allow the viewer to efficiently preview the movie before downloading the entire sequence (Col. 10, lines 41-51). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Bobo II ('507) and Sprague as both of these inventions relate to the efficient creation, transfer, and display of material from a server to a client. Adding the teaching of Sprague provides the benefit of containing a sequence of reduced size images within a single file avoiding the situation of retrieving each frame individually. Bobo II ('507) continues by teaching *using a system identification number* in that the files for each user are stored in a separate directory assigned to just that one user because an entire directory for a given user generally can be protected easier than the individual files. The memory,

however, may be organized in other ways with the files for a single user being stored in different directories. The first part of the filename is a number preferably sequentially determined according to the order in which messages arrive for that user. The preferred naming convention for ending the filenames is depicted in Fig. 6. Each page of the facsimile message is saved as a separate file with an extension defined by the format of the file. Thus, the files will end with an extension of ".TIFF," ".PPM," ".GIF," or ".HTML" according to the format of the particular file (Col. 11, lines 32-45).

In regard to dependent Claim 19, Bobo II ('507) fails to explicitly teach that the *thumbnail images are created and stored in a single file*. However, Sprague teaches a "thumbnail video sequence" may be transmitted to allow browsing of the video sequence itself, which comprises a thumbnail version of each intracoded frame within the video sequence (Col. 10, lines 41-51). This would allow the viewer to efficiently preview the movie before downloading the entire sequence. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Bobo II ('507) and Sprague as both of these inventions relate to the efficient creation, transfer, and display of material from a server to a client. Adding the teaching of Sprague provides the benefit of containing a sequence of reduced size images within a single file avoiding the situation of retrieving each frame individually. Bobo II ('507) continues by teaching *using a system identification number* in that the files for each user are stored in a separate directory assigned to just that one user because an entire directory for a given user generally can be protected easier than the individual files. The memory, however, may be organized in other ways with the files for a single user being

stored in different directories. The first part of the filename is a number preferably sequentially determined according to the order in which messages arrive for that user. The preferred naming convention for ending the filenames is depicted in Fig. 6. Each page of the facsimile message is saved as a separate file with an extension defined by the format of the file. Thus, the files will end with an extension of ".TIFF," ".PPM," ".GIF," or ".HTML" according to the format of the particular file (Col. 11, lines 32-45).

Response to Arguments

Applicant's arguments with respect to claims 1 and 2 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H Blackwell whose telephone number is 571-272-4089. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James H. Blackwell
03/29/05


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER